The salience of comparison standards and the activation of social norms: consequences for judgments of happiness and their communications

Strack, Fritz; Schwarz, Norbert; Chassein, Brigitte; Kern, Dieter; Wagner, Dirk

Veröffentlichungsversion / Published Version
Arbeitspapier / working paper

Zur Verfügung gestellt in Kooperation mit / provided in cooperation with:
GESIS - Leibniz-Institut für Sozialwissenschaften

Salience of comparison standards and the activation of social norms: Consequences for judgments of happiness and their communication

Fritz Strack, Norbert Schwarz
Brigitte Chassein, Dieter Kern
Dirk Wagnar

ZUMA-Arbeitsbericht Nr. 89/11

Zentrum für Umfragen, Methoden und
Analysen e.V. (ZUMA)
Postfach 12 21 55

D-6800 Mannheim 1

Seit Juli 1983 sind die ZUMA-Arbeitsberichte in zwei Reihen aufgeteilt:

Die **ZUMA-Arbeitsberichte** (neue Folge) haben eine hausinterne Begutachtung durchlaufen und werden vom Geschäftsführenden Direktor zusammen mit den übrigen Wissenschaftlichen Leitern herausgegeben. Die Berichte dieser Reihe sind zur allgemeinen Weitergabe nach außen bestimmt.

Die **ZUMA-Technischen Berichte** dienen zur hausinternen Kommunikation bzw. zur Unterrichtung externer Kooperationspartner. Sie sind nicht zur allgemeinen Weitergabe bestimmt.

The attached reprint replaces ZUMA-Arbeitsbericht No. 89/11 by the same authors.

Fritz Strack, Norbert Schwarz, Brigitte Chassein, Dieter Kern, & Dirk Wagner (1990). The salience of comparison standards and the activation of social norms: Consequences for judgments of happiness and their communication. British Journal of Social Psychology, 29, 303-314.

British Journal of Social Psychology (1990), 29, 303–314 *Printed in Great Britain*

Salience of comparison standards and the activation of social norms: Consequences for judgements of happiness and their communication

Fritz Strack*
Mannheim University

Norbert Schwarz
Zentrum fur Umfragen, Methoden und Analysen (ZUMA), Mannheim

Brigitte Chassein, Dieter Kern and Dirk Wagner
Mannheim University

Two studies were conducted in which subjects' reports of their own happiness were influenced (a) by the salience of comparison standards and (b) by the social norm that was activated in the context of communicating those judgements. It was found that the presence of another person who was relatively worse off led to more positive judgements of the subjects' own happiness. This contrast effect was increased when subjects' attention was directed towards the comparison person by a natural salience manipulation in the form of a seating arrangement at the time the questionnaire had to be filled out. The results of the second study, in which the mode of communication (private vs. public) and the apparent state of health of the comparison person were varied (physically disabled or not), show that such contrastive judgements may not be uttered when the judgement has to be reported publicly to the disabled confederate. Taken together, these studies demonstrate how both cognitive and communicative mechanisms must be taken into account to understand the determinants of judgements of subjective well-being

Comparisons play a central role in judgements of subjective well-being and have often been recognized as a source of happiness and as an origin of discomfort and even unrest (Runciman, 1966; Walster, Walster & Berscheid, 1978). To understand how people evaluate the quality of their own life, it therefore seems crucial to investigate the mechanisms of such comparisons. This becomes even more evident in the face of the surprisingly weak relationships between objective life-circumstances and subjective well-being that have typically been obtained in survey research (cf. Kamman, 1982).

The role of comparisons for individuals' subjective well-being was conceptualized by Schwarz & Strack (1990) in a comprehensive judgement model. This model deviates radically from many survey researchers' conception of well-being as a function of the hedonic value and the frequency (or duration) of objective events and circumstances (e.g.

* Requests for reprints should be addressed to Fritz Strack, Max-Planck-Institut fur psychologische Forschung, Leopoldstr. 24, D-8000 Munchen 40, Germany

Campbell, 1981). Reports of happiness and satisfaction are seen as judgements that are based on relevant information which is accessible at the time of judgement and, as a consequence, objective events have an impact on subjective well-being to the extent that people think about them (or about their consequences) when they generate the judgement.

In a previous study, the influence of thinking about events in one's own life was investigated (Strack, Schwarz & Gschneidinger, 1985). It was found that positive and negative events that had happened in the past affected happiness ratings in the hedonically opposite direction: that is, respondents who thought about past positive events reported lower general well-being than respondents who thought about negative events. This result suggests that hedonically relevant past experiences may serve as standards of comparison in judgements of happiness, and that increasing their cognitive accessibility will increase their impact on such judgements. The present studies extend this research on intra-individual comparisons by investigating the use of another person's situation as a possible standard. Based on the above speculations, information about another person should serve as an inter-individual comparison standard for judgements of well-being.

The assumption that inter-individual comparisons determine judgements of subjective well-being has frequently been made in the sociological literature on relative deprivation (e.g. Runciman, 1966), but little experimental evidence on the phenomenon is available. Theoretically, individuals should evaluate their own life less favourably when information about the situation of others suggests that the latter are better off. A group perspective would regard such contrast effects as being a consequence of intergroup differentiation processes: in-group comparisons, however, might not lead to such contrast effects because of fraternal relative deprivation (Runciman, 1966). While the sociological literature provides evidence in line with this hypothesis (cf. Crosby, 1976), a number of questions regarding the underlying judgemental process remain unanswered. Most importantly, it is unclear from the existing literature (Suls & Miller, 1977) at what stage of the judgement process the comparison standard comes into play.

There are at least two possibilities. On the one hand, the standard may be used when the person is asked to or wants to generate a judgement. According to perspective theory (Ostrom & Upshaw, 1968), the salience of the comparison information during the actual judgement task should produce a contrast effect by providing a more extreme anchor for the response scale. On the other hand, exposure to the information may by itself initiate a comparison process before the person is asked to make a judgement. Kahneman & Miller (1986), for instance, discuss the possibility that certain stimuli elicit comparative judgements as well as the standards that are involved. If, for example, person A is exposed to person B – who deviates on a certain dimension from person A – the latter may spontaneously compare her- or himself with the former. Thus, if Jane meets Joan, who is a very talented musician, Jane may deplore her own lack of talent without being asked or having intended to evaluate herself. To the extent that such spontaneous comparison processes occur, they should be more likely if the potential dimension of comparison is *salient* at the time of exposure to the information. If Jane's attention is directed toward Joan's musical talent, a comparison on this dimension should be more likely than if her attention were directed to some other dimension, like her income. It should therefore be possible to manipulate spontaneous comparisons by experimentally varying the salience of potential dimensions of comparison.

To put these ideas to the test, we conducted a study in which the accessibility of comparison information, the salience of comparison information, and the salience of the comparison dimension were manipulated. The *accessibility* of comparison information was varied such that information about another person with a severe health problem was either presented or not. It was anticipated that information about another person would serve as a standard of comparison to the extent that it was cognitively accessible for the judgement. Thus, subjects were expected to evaluate their own well-being more favourably when they were exposed to information about another person's unfortunate situation, e.g. his or her health problems, than when they were not. In addition, for half of the subjects who received comparison information, its *salience* was increased at the time of the judgement task by seating the other person opposite the subject. It was expected that the impact of comparison information would be increased as a function of this salience manipulation. The comparison *dimension* was made salient for half of all subjects *prior to* the judgement task in order to explore the conditions under which spontaneous comparisons might be expected. This was done by directing subjects' attention towards the dimension of health in some of the conditions. It was expected that spontaneous comparisons and, consequently, contrast effects would be more likely under such circumstances.

In sum, the primary aim of the present experiment was to investigate important judgemental aspects of the comparison processes that seem to be part of people's reports about their quality of life. More specifically, we wanted to study the influences of both the salience of the comparison information and the salience of the comparison dimension on judgements of subjective well-being. Thus, a 2 × 2 factorial design was appropriate in which the salience of the judgemental dimension and the salience of the comparison information were orthogonally combined. In addition, a non-factorial control condition was used in which only the salience of the specific comparison dimension was varied but no comparison information was provided.

Experiment 1

Method

Overview. The experiment was conducted in two rooms, a TV recording studio and an adjacent room with a TV monitor that was ostensibly connected to the camera in the studio. In reality, it was connected to a video-recorder hidden in the studio. One subject and a confederate participated in each experimental session which consisted of two parts. First, subjects observed confederates describing their unfortunate life-situation. Subsequently, both participants filled out a questionnaire that asked, among other things, for ratings of global and specific subjective well-being.

Subjects. Fifty-seven university students of both sexes were paid volunteers for a study on 'impression formation'. They were randomly assigned to the experimental and control conditions. Five subjects had to be eliminated from the analysis because their own life-situation resembled that of the confederate (they reported having a severe chronic illness). For them, the experimental requirements were not met because the confederate's self-description did not provide a negatively discrepant standard of comparison.

Procedure. To manipulate the accessibility of comparison information, about two-thirds of the subjects went through the first part of the experiment as described below ('comparison information presented' conditions), whereas the remaining subjects ('comparison information not presented' conditions) only completed the second part of the experiment, which consisted of filling out the final questionnaire.

Subjects in the experimental conditions (comparison information presented) were met by the experimenter and shortly afterward were joined by a second 'subject' who was actually a (male) confederate and blind to the experimental condition. The experimenter then asked the subject and the confederate whether they had

known each other before. After this was ruled out, the experimenter explained the ostensible purpose of the study, namely, to find out how two strangers form impressions of each other. For this purpose, it was necessary to have two participants in one experimental session, an actor and an observer. The actor would have to provide some information about himself by talking about something important to him while the observer would have to listen. To prevent the influence of possible non-verbal reactions from the observer, the observer would be in a separate room and would watch the actor on a video screen. To avoid problems of self-selection, the subjects would be randomly assigned to the roles. The lottery tickets, however, were rigged such that the true subject was always in the role of the observer.

After the roles were assigned, the experimenter ushered both subject and confederate into the TV studio where the confederate was seated in an armchair and the camera was focused on him. The confederate was instructed to talk about some aspects of his life that were important to him. The experimenter then left with the subject and went into the adjacent room where he turned on the TV monitor. The confederate meanwhile had switched on the video-recorder and had started the pre-recorded tape.

To reduce suspicion, the videotape elicited two pseudo-interactions with the experimenter. At the beginning, the taped actor asked if he should start now with his description. The experimenter opened the connecting door and the taped actor turned his head in the direction of the experimenter who then answered affirmatively. At the end, the actor asked if he had said enough. The experimenter assented and the tape showed the actor standing up. Immediately afterwards, the confederate entered the room and the experimenter turned the TV monitor off when the empty armchair was on the screen.

On the tape, the confederate described himself as a student whose life was dominated by kidney dialyses that he had to undergo several times a week. Apart from the physical and psychological problems involved, he mentioned that his studies were greatly impaired by this frequent and irregular treatment and that he could not have a satisfying social life.

After the confederate had joined the subject and the experimenter in the observation room, a questionnaire was handed to both the subject and the confederate with the ostensible purpose of collecting some 'general information' about the participants. The questionnaire contained several filler items as well as the dependent variables. With the completion of the questionnaire, the experiment was terminated. The subjects were carefully interviewed about possible suspicions and whether similar conditions prevailed in their own life. At the end, they were thoroughly debriefed about the true purpose of the study and were sworn to secrecy. Although subjects had been shown a pre-recorded videotape when they had been led to believe that they were actually watching a live recording, no participant was suspicious about the cover story or the procedure of the experiment. This was even the case when such a contrived situation was suggested as a possibility to the subjects. Subjects seemed understanding about the deception that was used, and no participant expressed any indignation or concern.

Independent variables. The above procedure describes the course of the experiment when the comparison information was presented. To increase the salience of this information at the time of the judgement, the confederate sat directly opposite the subject at a table when the questionnaire had to be filled out ('comparison person salient'). In the 'comparison person not salient' condition, the confederate sat outside the subject's field of vision at that time. It was assumed that the visual salience of the comparison person would increase the accessibility of the comparison information at the time of the judgement. As mentioned earlier, subjects in the 'comparison information not presented' condition simply filled out the questionnaire, expecting to complete the observation task afterwards.

To increase the salience of the comparison *dimension*, the experimenter asked half of the subjects at the beginning of the experimental session if they would be willing to participate in an unrelated medical study at the end of the experiment. This would involve having their blood pressure checked and answering a few medical questions. In addition, the blood pressure meter was visible to the subjects in this condition. It was assumed that this procedure would activate a relevant judgemental dimension on which the comparison person was sufficiently different from the subject and thus elicit a spontaneous comparison.

Dependent variables. Subjects reported their personal satisfaction on both a global and a specific dimension. Because previous research (e.g. Schwarz, Strack, Kommer & Wagner, 1987) has shown that different results may be obtained depending on the specificity of the dimension, subjects were asked to evaluate their satisfaction with both their life in general and with their health. To record subjects' global satisfaction they were asked: 'Thinking about your life in general, how satisfied are you with your life as a whole?' Answers were

given on a 11-point scale whose end-points were labelled 'very satisfied' (1) and 'very dissatisfied' (11). The second dependent variable of interest was subjects' satisfaction with their own health. Like general life-satisfaction, this specific variable was also assessed on an 11-point scale with the end-points labelled 'very satisfied' (1) and 'very dissatisfied' (11).

Results

General life satisfaction. From the mean ratings in Table 1 it can be seen that the presence of comparison information exerted a strong influence on judgements of satisfaction. Regardless of the specific conditions, subjects who witnessed the confederate describe his unfortunate situation rated themselves as more satisfied ($M = 3.20$) than subjects who were not exposed to this information ($M = 4.91$). In addition, this contrast effect was more pronounced when the comparison person was visually salient during the judgement phase of the experiment. Thus, the highest ratings of satisfaction with life as a whole were obtained when the subjects faced the person, who had previously described his predicament, while they were forming their judgement. The statistical reliability of these differences is reflected by significant main effects* of presence vs. absence of comparison information ($F(1,51) = 14.85$, $p > .001$) and salience of the comparison person when the information was presented ($F(1,51) = 5.48$, $p > .03$). However, manipulation of the salience of the comparison dimension did not affect ratings of general life satisfaction. This is evident by inspection of the means and further supported by the lack of a main effect of this variable or a two-way interaction (Fs < 1). [There were no significant main or interaction effects involving sex of subject.]

Table 1. Judgements of general life satisfaction (Expt 1)

	Comparison information Presented		
Comparison dimension	Comparison person Salient	Comparison person Not salient	Not presented
Salient	2.75	3.78	4.80
Not salient	2.33	3.89	5.00

Note. Judgements were measured on a 1–11 rating scale where 1 = 'very happy' and 11 = 'very unhappy'.

Satisfaction with own health. Inspection of Table 2 shows that subjects who reported their satisfaction without any prior experimental treatment described themselves as less satisfied ($M = 4.50$) than subjects who were either exposed to comparison information ($M = 2.51$) or for whom the potential comparison dimension was made salient ($M = 2.60$). The appropriate statistical interaction was significant ($F(2,51) = 3.38$, $p < .05$). Individual contrasts revealed that the mean of this group differed significantly from the mean ratings of all other groups (all ps $< .04$) which did not differ significantly

* As the within-cell variances were homogeneous, the error term for all comparisons included the control group.

Table 2. Judgements of specific health satisfaction (Expt 1)

Comparison dimension	Comparison information: Presented — Comparison person Salient	Comparison information: Presented — Comparison person Not salient	Comparison information: Not presented
Salient	2.63	2.89	2.60
Not salient	2.11	2.44	4.50

Note. Judgements were measured on a 1–11 rating scale where 1 = 'very happy' and 11 = 'very unhappy'

from one another. In contrast to the ratings of general life satisfaction, these specific judgements were more sensitive to the present experimental manipulation of salience of the health dimension. Here, unlike in the case of general ratings, the salience of the judgement dimension affected the ratings even in the absence of comparison information. These results suggest that if comparison information is presented or the judgement dimension is made salient, then a contrast effect occurs.

Discussion

These results demonstrate that comparison information affects judgements of general life satisfaction and that this influence depends on the accessibility of the information at the time of making the judgement. The information presented led to contrast effects in the sense that reports of satisfaction were influenced in the opposite direction of the hedonic value of the context information. Most interestingly, the strongest effects were obtained when the 'sick' confederate sat opposite the subjects as they filled out the questionnaire, increasing the salience of the comparison information at the time of judgement.

Judgements of general life satisfaction were not affected, however, by the manipulated salience of the health dimension which was introduced prior to subjects' exposure to the confederate. The activation of the health dimension did, however, influence reports of specific health satisfaction. Here, the experimental manipulation influenced the judgements even in the absence of comparison information introduced by the confederate. Moreover, the presence of comparison information and its increased accessibility at the time of judgement did not add to the effect of previously activating the health dimension.

This suggests that the effect of activating the health dimension depended on the *particular* judgement subjects were asked to make. It is possible that directing subjects' attention towards the medical dimension induced them to think about their own health in comparison with the rest of the population. Thus, a comparative judgement might have been indirectly elicited through this salience manipulation. Being induced to think about one's health may very well elicit thoughts about other people's health and about one's own relative position. The question arises why no parallel effect was found for the ratings of general life satisfaction. The reason may be that people have little information about where they would be located in the distribution of this variable. Thoughts about one's own health relative to others' health may not spontaneously evoke thoughts about the broader implications for one's life satisfaction. These broader implications may, however, have been called to mind by the confederate describing his health problems and reporting how they affected his general living conditions.

It is obvious that this interpretation is speculative and needs additional empirical support. The data clearly suggest, however, that directing subjects' attention towards a potential dimension of comparative judgements does have an affect on those specific judgements, even though the precise mechanism of such an influence is not yet understood.

The social implications of comparative judgements of well-being

The present findings demonstrate that inter-individual comparisons influence judgements of well-being in the opposite direction of the hedonic value of the comparison information. In the case of 'downward comparisons' (Taylor, Wood & Lichtman, 1983; Wills, 1981), one person's predicament may contribute to another person's happiness. While this mechanism may be a valid description of the cognitive processes involved and their emotional consequence, it stands in conflict with important social norms.

First, it is socially undesirable to experience *Schadenfreude* (malicious enjoyment of others' misfortunes) if another person is in a deplorable situation. Communicating one's own relatively more positive situation to another person who is worse off, however, may violate precisely this social norm. Conversely, it is socially desirable to empathize with a person who is worse off than oneself. Such empathy should lead one to experience vicariously the other person's feelings (Wispé, 1986) but not to feel better.

These norms serve important functions for social conduct. Primarily, they protect disadvantaged persons from negative emotions. If other people felt good as a consequence of being exposed to their misery, disadvantaged persons might even feel worse. Thus *Schadenfreude* is socially inappropriate in such situations. Moreover, disadvantaged persons' feelings might be improved if they could communicate with other people who are in a similar situation (cf. Lehman, Ellard & Wortman, 1986).

These social implications of judgements of well-being should obviously come into play if the judgements are publicly expressed. If the disadvantaged other is a potential recipient of the communicated judgement, its expression should be modified according to these social pressures. Thus, the accessibility of information about a person who is relatively worse off should only lead to contrast effects if the judgement is not going to be communicated to that other person. If, on the other hand, the judgement is going to be publicly communicated to the disadvantaged person, the resulting ratings of well-being should be less positive as a result of the prevalent social pressures.

However, social influences on public expressions of happiness should be different if the recipient of the judgement is *not* worse off than the communicator. Under such 'normal' circumstances, public reports are often inflated and negative self-reports are considered socially undesirable. This tendency is not only reflected in the answers to ritualized inquiries about someone's well-being ('how are you?'; 'Just fine.') but also in findings from survey research. Typically, reports of happiness and satisfaction are skewed towards the positive side of the response scale. More important, this tendency towards positivity is more pronounced in a person-to-person interview than in a self-report questionnaire. In a sample of Catholic Americans, Sudman (cited by Smith, 1979) found that 23 per cent of

respondents described themselves as 'very happy' in a questionnaire as opposed to 36 per cent when they were personally interviewed. Similarly, LeVois, Nguyen & Atkisson (1981) found that clients' reports of their satisfaction with community health services were significantly more positive when the questions were administered orally rather than in writing.

There may be several reasons for this phenomenon. First, self-presentational goals exist that require a self-description that is positive or at least not negative (cf. Tedeschi, 1981). Second, if a person's attention is directed toward his or her feelings, their negativity and intimacy are often related and their disclosure remains incomplete (Archer, Hormuth & Berg, 1982; Hormuth, 1986). Third, reports of negative experiences typically require empathic reactions, which may be seen as an inappropriate imposition on the other person (Reisman & Yamakowski, 1974).

In each case, the social norms that guide public expressions of well-being lead to more positive reports except in the presence of a relatively disadvantaged person. If, on the other hand, the judgement is not publicly expressed but privately recorded, the judgemental mechanisms elaborated above should operate: that is, the other person should provide a standard of comparison which influences the judgement in the opposite direction. If that person is relatively worse off, the private self-ratings should become more positive, as was found in Expt 1.

Thus, the influence of how a judgement of well-being is communicated (private vs. public) should have different consequences, depending on the relative position of the comparison person. The interaction between these two variables constituted the hypotheses of the second study. It was assumed that a person who is physically disabled would provide a negative standard of comparison that would lead to more positive self-reports. This would essentially replicate the results of Expt 1. When the judgements are to be expressed in the presence of the disabled person, however, they should become less positive for the reasons discussed above. If the other person does not show any signs of physical impairment or of relative deviance on judgemental dimension, however, the public reports should be more positive than the private ones.

Experiment 2

Method

Subjects. Thirty-three students from the University of Mannheim participated in the experiment, which was described as part of a study that dealt with the construction of a questionnaire about subjective well-being.

Procedure. When the subjects arrived in the experimental room, they met another 'subject' who was, in fact, a confederate of the experimenter. In one condition, the confederate had a severe physical impairment and sat in an electric wheelchair. When the subject sat down next to this confederate, a pen would fall to the floor and the confederate would ask the subjects if they could pick it up. This was done to direct the subjects' attention towards the impairment of the disabled person. In the other condition, the confederate was not disabled in any way.

In the 'private' condition, subjects found the confederate already filling out the questionnaire that they were supposed to answer. In the 'public' condition, the experimenter explained that – to avoid systematic experimenter bias – the interviews would not be conducted by the experimenter but by the subjects themselves. The order in which the interviews would be conducted was determined by lottery tickets, which were rigged such that the subject was 'first' interviewed by the confederate. [In fact, the subject never interviewed the confederate.] Both factors were orthogonally combined into a 2 (confederate: handicapped vs not handicapped) × 2 (mode of communication: questionnaire vs. interview) factorial design.

To assess their global well-being, subjects had to indicate both their happiness and their satisfaction with life in general on a 1–7 scale. A low value reflected more and a high value less happiness and satisfaction. In the private conditions, the appropriate values had to be circled on the questionnaire by the subject, whereas in the public interview conditions the subject had to read the appropriate number and the confederate would act as an interviewer and record the response by writing it down. Because the results for the two measures did not differ from each other in any significant way, the happiness and satisfaction ratings will be reported as one combined index of subjective well-being.

Results

The appropriate 2 × 2 ANOVA yielded two marginally significant effects: a main effect for mode of communication ($F(1,29) = 3.89$, $p < .06$) and an interaction effect for both factors ($F(1,29) = 3.27$, $p < .09$) The nature of this interaction was diagnosed by individual comparisons between the cell means.

Ratings were compared for subjects who gave their reports under private conditions. As can be seen from Table 3, subjects in the private (questionnaire) condition reported higher well-being when the confederate was disabled than when he was not (t (29) = 1.97, $p < .06$). Thus, the private conditions provide a conceptual replication of the results of Expt 1 where the salience of the negative comparison information led to contrast effects on ratings of satisfaction. No contrast effect emerged, however, when the ratings had to be given in public. Under those (interview) conditions, subjects' reported well-being was not influenced by the physical condition of the confederate ($t < 1$). that is, a contrast effect was only obtained for private judgements but not for their public expression *vis-á-vis* a disabled confederate.

To test for effects of self-presentation, the mean ratings under the two modes of communication were compared. Inspection of Table 3 reveals that there was a self-presentation effect when the confederate was not physically disabled. As expected, subjects described themselves more positively in the presence of a non-disabled person when they were interviewed than when they responded to the questionnaire ((t (29) = 2.67, $p > .02$). This replicates previous findings from survey research (e.g. Smith, 1979). Reports that were given in the presence of a disabled person, on the other hand, did not differ as a function of the mode of communication ($t < 1$). Under these conditions, the public reports did not reflect a positive self-presentation, nor did they confirm the prediction that subjects in the interview condition would present themselves as less happy and satisfied.

Taken together, the results of Expt 2 suggest that contrast effects are obtained for judgements of well-being when they are privately reported. They further suggest that a

Table 3. Judgements of subjective well-being (Expt 2)

	Confederate	
Mode of communication	Disabled	Not disabled
Interview (public)	2.3	2.0
Questionnaire (private)	2.4	3.4

Note. The judgements were measured on a rating scale where 1 = 'very happy/satisfied' and 7 = 'very unhappy/dissatisfied'

positive self-presentation is likely to occur when judgements of well-being are publicly expressed towards another individual who is not visibly disabled. However, it should be noted that the number of subjects was relatively small and, as a consequence, the results only hover around the conventional levels of statistical significance. Therefore, the robustness of these findings still needs to be proven.

General discussion

The two experiments reported here demonstrate the impact of social comparison standards on evaluations of subjective well-being. In both studies, respondents reported greater well-being and satisfaction when they were exposed to another person who was in a less fortunate situation. However, the findings of Expt 1 indicate that the impact of a comparison standard is a function of its salience at the time of judgement. Specifically, respondents reported higher well-being when the comparison person sat opposite them at the same table while filling out the questionnaire. This suggests that subjects may not have engaged spontaneously in a comparison of their own situation with that of the comparison person. Had they formed their judgement while he reported on his illness, they might later have retrieved this judgement from memory. If so, their report should have shown little variation as a function of the confederate's salience at the time of the report. It seems more likely that subjects made their comparisons after they were asked to form a judgement, at which time they were more likely to consider the comparison information when the confederate was the focus of their attention than when he was not.

Social comparison processes have long been a central topic in social psychology (cf. Festinger, 1954) and have more recently been studied as a function of the person's membership of a social group (e.g. Commins & Lockwood, 1979; Oakes & Turner, 1980). The present findings, however, suggest that comparative self-judgements occur in situations where pre-existing group membership is not very likely. Of course, comparative judgements of the kind reported here may also result in discriminative social behaviour (cf. Tajfel, 1982) and other negative consequences (cf. Klee, 1980).

It should be noted, however, that social comparison processes are not the only way in which the social context at the time of judgement affects reported well-being. As the second experiment demonstrates, reports of well-being are also subject to self-presentation concerns. Specifically, respondents reported higher well-being in face-to-face interviews than in self-administered questionnaires, when the interviewer was not disabled. But when the interviewer was disabled, no difference emerged between private and public reports. This finding indicates that public reports are not always inflated. Different processes may have contributed to the observed reactions. On the one hand, telling a person in an unfortunate situation how good one's own life is might be considered socially inappropriate. If so, public reports in the presence of a disabled person should be lower than private judgements. This was not found. Alternatively, disabled persons may not elicit the need to present themselves as happy and successful to the same degree as non-disabled persons. Finally, it is conceivable that subjects' private judgement in the presence of a disabled other were already so positive, due to the comparison processes discussed above, that upward adjustments in the public condition were not necessary.

In conclusion, the present findings indicate that reports of subjective well-being, used as subjective indicators in sociological research, may be a function of temporary influences as described in the judgement model of well-being (Schwarz & Strack, 1990). They vary as a function of the salience and nature of inter- and intra-individual comparison standards and of mood at the time of judgement. Moreover, they are subject to the social context in which the report is given. It is therefore not surprising that the relationship between objective conditions of life and subjective well-being is weak if these judgemental processes are not taken into account.

Acknowledgements

This research was supported by the Deutsche Forschungsgemeinschaft (Str 264/2-4). The authors would like to thank Annette Dreisigacker for her help during the initial phase of the research and Gerd Bohner for helping to analyse the data

References

Archer, R. L., Hormuth, S. E. & Berg, J. H. (1982). Avoidance of self-disclosure: An experiment under conditions of self-awareness. *Personality and Social Psychology Bulletin*, 8, 122–128

Campbell, A. (1981). *The Sense of Well-being in America*. New York: Sage.

Commins, B. & Lockwood, J. (1979). Social comparison and social inequality: An experimental investigation in intergroup behaviour. *British Journal of Social and Clinical Psychology*, 18, 285–290.

Crosby, F. (1976). A model of egoistical relative deprivation. *Psychological Review*, 83, 85–113

Festinger, L. (1954). A theory of social comparison processes. *Human Relations*, 7, 117–140

Hormuth, S. E. (1986). Selbstenthüllung im Lichte der sozialpsychologischen Selbstkonzeptforschung. In A. Spitzenagel & C. Schmidt-Atzert (Eds), *Sprechen und Schweigen*. Bern: Huber

Kahneman, D. & Miller, D. T. (1986). Norm theory: Comparing reality to its alternatives. *Psychological Review*, 93, 136–153.

Kamman, R. (1982). Personal circumstances and life events as poor predictors of happiness. Paper presented at the 90th Annual Convention of the American Psychological Association, Washington, DC.

Klee, E. (1980). *Behindert: Ein Kritisches Handbuch*. Frankfurt: Fischer Verlag

Lehman, D. R., Ellard, J. H. & Wortman, C. B. (1986). Social support for the bereaved: Recipients' and providers' perspectives on what is helpful. *Journal of Consulting and Clinical Psychology*, 54, 438–446

LeVois, M., Nguyen, T. D. & Attkisson, C. C. (1981). Artifact in client satisfaction assessment: Experience in community mental health settings. *Evaluation and Program Planning*, 4, 139–150.

Oakes, P. & Turner, J. C. (1980). Social categorization and intergroup behaviour: Does minimal intergroup discrimination make social identity more positive? *European Journal of Social Psychology*, 10, 295–301

Ostrom, T. M. & Upshaw, H. S. (1968). Psychological perspective and attitude change. In A. G. Greenwald, T. C. Brock & T. M. Ostrom (Eds), *Psychological Foundations of Attitudes*, pp. 217–242. New York: Academic Press

Reisman, J. M. & Yamakowski, T. (1974). Psychotherapy and friendship: An analysis of the communications of friends. *Journal of Counseling Psychology*, 30, 121–125

Runciman, W. G. (1966). *Relative Deprivation and Social Justice*. London: Routledge & Kegan Paul

Schwarz, N. & Strack, F. (1990). Evaluating one's life: A judgement model of subjective well-being. In F. Strack, M. Argyle & N. Schwarz (Eds), *Subjective Well-being*. Oxford: Pergamon

Schwarz, N., Strack, F., Kommer, D. & Wagner, D. (1987). Soccer, rooms, and the quality of your life: Mood effects on judgements of satisfaction with life in general and with specific domains. *European Journal of Social Psychology*, 17, 69–79

Smith, T. W. (1979). Happiness: Time trends, seasonal variations, inter-survey differences, and other mysteries. *Social Psychology Quarterly*, 42, 18–30.

Strack, F., Schwarz, N. & Gschneidinger, E. (1985). Happiness and reminiscing: The role of time perspective, affect, and mode of thinking. *Journal of Personality and Social Psychology*, 49, 1460–1469

Suls, J. M. & Miller, R. L. (Eds) (1977). *Social Comparison Processes: Theoretical and Empirical Perspectives*. New York: Wiley/Halsted.

Tajfel, H. (1982). Social psychology of intergroup relations. *Annual Review of Psychology*, 33, 1–39.

Taylor, S. E., Wood, J. V. & Lichtman, R. R. (1983). It could be worse: Selective evaluation as a response to victimization. *Journal of Social Issues*, 39, 19–40.

Tedeschi, J. T. (1981). *Impression Management. Theory and Social Psychological Research*. New York: Academic Press.

Walster, E., Walster, G. W. & Bersheid, E. (1978). *Equity. Theory and Research*. Boston, MA: Allyn & Bacon.

Wills, T. A. (1981). Downward comparison principles in social psychology. *Psychological Bulletin*, 90, 245–271.

Wispé, L. (1986). The distinction between sympathy and empathy: To call for a concept, a word is needed. *Journal of Personality and Social Psychology*, 50, 314–321.

Received 7 August 1989, revised version received 3 May 1990